

APPENDIX D

**NEVADA DIVISION OF WILDLIFE – GILA MONSTER PROTOCOL
FOR MINIMIZING IMPACTS ON THE CONSTRUCTION SITE**

GILA MONSTER PROTOCOL FOR MINIMIZING IMPACTS ON THE CONSTRUCTION SITE

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Background

- Per Nevada Administrative Code 503.080, the Gila monster is classified as a Protected reptile.
- Per Nevada Administrative Codes 503.090, and 503.093, no person shall capture, kill, or possess any part thereof of Protected wildlife without the prior written permission by the Nevada Division of Wildlife (NDOW).

This species is rarely observed relative to other species and is the primary reason for its Protected classification by the State of Nevada. The USDI Bureau of Land Management has recognized this lizard as a sensitive species since 1978. Most recently, the Gila monster was designated as an Evaluation species under the Clark County Multiple Species Habitat Conservation Plan (MSHCP). The designation was warranted because inadequate information exists to determine if mitigation facilitated by the MSHCP would demonstrably cover conservation actions necessary to insure the species persistence without protective intervention as provided under the federal Endangered Species Act.

The Gila monster is the only venomous lizard endemic to the United States. Its behavioral disposition is somewhat docile and avoids confrontation. But it will readily defend itself if threatened. Most bites are illegitimate, resulting from harassment or careless handling.

The banded Gila monster (*Heloderma suspectum cinctum*) occurs in Clark, Lincoln, and Nye counties of Nevada. Found mainly below 5,000 feet elevation, its geographic range approximates that of the desert tortoise. The Gila monster is recognizable by its striking black and orange-pink coloration. In keeping with its namesake, the banded Gila monster retains a black chain-link, banded appearance into adulthood. Other lizard species are often mistaken for the Gila monster. Of these, the western banded gecko (*Coleonyx variegatus*) and chuckwalla (*Sauromalus obesus* (= *ater*)) are most frequently confused with the Gila monster. All three species share the same habitats.

The banded gecko is often mistakenly identified as a baby or juvenile Gila monster. Banded geckos do have a finely granular skin and pattern that can be suggestive of the Gila monster to the untrained eye. However, banded gecko heads are somewhat pointed at the snout and the relatively large eyes have vertical pupils. Snouts of Gila monsters are bluntly rounded and the smallish eyes have round pupils. Newly hatched Gila monsters are about 5-6 inches long with a vivid orange and black, banded pattern. Geckos are at best cream to yellow and brown in pattern and do not exceed 5 inches.

Both juvenile and adult chuckwallas are commonly confused with the Gila monster. Juvenile chuckwallas have an orange and black, banded tail. Although banding of the tail fades as

chuckwallas mature, their large adult size (up to 17 inches) rivals that of the Gila monster. Adult chuckwallas have a body shape somewhat suggestive of the Gila monster, but they lack the coarsely beaded skin and black and orange body pattern of the Gila monster.

Gila monster habitat requirements center on desert wash, spring and riparian habitats that interdigitate primarily with complex rocky landscapes of upland desert scrub. Hence, Gila monster habitat bridges and overlaps that of both the desert tortoise and chuckwalla. Gila monsters are secretive and difficult to locate, spending >95% of their lives underground.

Gila monsters make use of deep crevices and caves of primarily rocky slopes for winter and summer refugia. When active they will also frequent animal burrows and other shallow refugia on more gentle slopes. Foraging Gila monsters seek nestlings of ground or low-shrub nesting birds (e.g. doves, quail), rodents (e.g. mice, kangaroo rats), and lagomorphs (e.g. cottontail) which are found in highest concentration in higher productivity areas, such as along well-vegetated wash courses of bajadas.

Scant information exists on detailed distribution and relative abundance in Nevada. The Nevada Division of Wildlife (NDOW) has ongoing management investigations addressing the species' status and distribution, hence additional distribution, habitat, and biological information is of utmost interest. In assistance to gathering additional information about Gila monsters in Nevada, NDOW will be notified whenever a Gila monster is encountered or observed, and under what circumstances.

Construction Site Protocols

Helpful to any instructional program, personnel should at least know how to: 1) identify Gila monsters and be able to distinguish it from other lizards such as chuckwallas and banded geckos; 2) report any observations of Gila monsters to the Nevada Division of Wildlife (NDOW); 3) be alerted to the consequences of a bite resulting from carelessness or unnecessary harassment; and 4) be aware of protective measures provided under state law.

- 1) Live Gila monsters found in harms way on the construction site will be captured and then detained in a cool, shaded environment ($\leq 85^{\circ}\text{F}$) by the project biologist or equivalent until a NDOW biologist can arrive for documentation purposes. Despite that a Gila monster is venomous and can deliver a serious bite, its relatively slow gate allows for it to be easily coaxed or lifted into an open bucket or box carefully using a long handled instrument such as a shovel or snake hook (Note: it is not the intent of NDOW to request unreasonable action to facilitate captures; additional coordination with NDOW will clarify logistical points). A clean 5-gallon plastic bucket w/ a secure, vented lid; an 18"x 18"x 4" plastic sweater box w/ a secure, vented lid; or, a tape-sealed cardboard box of similar dimension may be used for safe containment. Additionally, written information identifying mapped capture location (e.g. GPS record), date, time, and circumstances (e.g. biological survey or construction) and habitat description (vegetation, slope, aspect, substrate) will also be provided to NDOW.

- 2) Injuries to Gila monsters may occur during excavation, blasting, road grading, or other construction activities. In the event a Gila monster is injured, it should be transferred to a veterinarian proficient in reptile medicine for evaluation of appropriate treatment. Rehabilitation or euthanasia expenses will not be covered by NDOW. However, NDOW will be immediately notified during normal business hours. If an animal is killed or found dead, the carcass will be immediately frozen and transferred to NDOW with a complete written description of the discovery and circumstances, habitat, and mapped location.
- 3) Should NDOW's assistance be delayed, biological or equivalent personnel on site may be requested to remove and release the Gila monster out of harms way. Should NDOW not be immediately available to respond for photo-documentation, a 35mm camera or equivalent will be used to take good quality photographs of the Gila monster in situ at the location of live encounter or dead salvage. The pictures, preferably on slide film, will be provided to NDOW. Pictures will include: 1) Encounter location (landscape overview with Gila monster in clear view); 2) a clear overhead shot of the entire body with a ruler next to it for scale (Gila monster should fill camera's field of view and be in sharp focus); 3) a clear, overhead close-up of the head (head should fill camera's field of view and be in sharp focus).

Please contact NDOW Biologist Christy Klinger at (702) 486-5127 x3718 for additional information regarding these protocols.